Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL GUIDELINE CLEARINGHOUSE

General

Guideline Title

Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder.

Bibliographic Source(s)

Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder. Melbourne (Australia): Australian Centre for Posttraumatic Mental Health; 2013. 177 p. [697 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: This guideline updates a previous version: Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder. Melbourne (Australia): Australian Centre for Posttraumatic Mental Health; 2007 Feb.

In recognition of the pace of advances in the field, it is recommended that the guidelines be reviewed and updated in five years' time.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Regulatory Alert

FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- May 10, 2016 – Olanzapine : The U.S. Food and Drug Administration (FDA) is warning that the antipsychotic medicine olanzapine can cause a rare but serious skin reaction that can progress to affect other parts of the body. FDA is adding a new warning to the drug labels for all olanzapine-containing products that describes this severe condition known as Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS).

Recommendations

Major Recommendations

Definitions for the recommendation grades and types (A-D, GPP, CP, RR) provided at the end of the "Major Recommendations" field.

Trauma and Trauma Reactions

Screening, Assessment and Diagnosis

GPP1 - For people presenting to primary care services with repeated non-specific physical health problems, it is recommended that the primary care practitioner consider screening for psychological causes, including asking whether the person has experienced a traumatic event, and describe some examples of such events.

GPP2 - Service planning should consider the application of screening (case finding) of individuals at high risk for posttraumatic stress disorder (PTSD) after major disasters or incidents, as well as those in high risk occupations.

GPP3 - The choice of screening tool should be determined by the best available evidence, with a view to selecting the best performing screen for the population of interest. Application of an inappropriate screening tool may result in over- or under-identification of problems.

GPP4 - Different populations may require different screening procedures. Programs responsible for the management of refugees should consider the application of culturally appropriate screening for refugees and asylum seekers at high risk of developing PTSD. Similarly, screening of children will require the use of developmentally sensitive tools designed for the purpose.

GPP5 - Screening should be undertaken in the context of a service system that includes adequate provision of services for those who require care.

GPP6 - Any individual who screens positive should receive a thorough diagnostic assessment.

Comprehensive Assessment of PTSD

GPP7 - A thorough assessment is required, covering relevant history (including trauma history), PTSD and related diagnoses, general psychiatric status (noting extent of comorbidity), physical health, substance use, marital and family situation, social and occupational functional capacity, and quality of life.

GPP8 - Assessment should include assessment of strengths and resilience, as well as responses to previous treatment.

GPP9 - Assessment and intervention must be considered in the context of the time that has elapsed since the traumatic event occurred. Assessment needs to recognise that whereas the majority of people will display distress in the initial weeks after trauma exposure, most of these reactions will remit within the following three months.

GPP10 - As part of good clinical practice, assessment needs to occur at multiple time points following trauma exposure, particularly if the person displays signs of ongoing difficulties or psychological deterioration.

GPP11 - Assessment and monitoring should be undertaken throughout treatment. When adequate progress in treatment is not being made, the practitioner should revisit the case formulation, reassess potential treatment obstacles, and implement appropriate strategies, or refer to another practitioner. Effective inter-professional collaboration and communication is essential at such times.

Diagnosis

GPP12 - Assessment should cover the broad range of potential posttraumatic mental health problems beyond PTSD, including other anxiety disorders, depression and substance abuse.

Assessment Instruments

GPP13 - It is recommended that practitioners be guided in their assessment of PTSD, comorbidity and quality of life, by the available validated self-report and structured clinical interview measures.

GPP14 - It is recommended that practitioners also use validated, user-friendly self-report measures to support their assessments of treatment outcomes over time.

Intervention Planning

GPP15 - Mental health practitioners are advised to note the presence and severity of comorbidities in their assessments, with a view to considering their implications for treatment planning.

GPP16 - Residual symptomatology should be addressed after the symptoms of PTSD have been treated.

GPP17 - The development of a robust therapeutic alliance should be regarded as the necessary basis for undertaking specific psychological

interventions and may require extra time for people who have experienced prolonged and/or repeated traumatic exposure.

GPP18 - Mental health practitioners should provide a clear rationale for treatment and promote realistic and hopeful outcome expectancy.

GPP19 - Mental health practitioners and rehabilitation practitioners should work together to promote optimal psychological and functional outcomes.

GPP20 - In most circumstances, establishing a safe environment is an important precursor to commencement of trauma-focussed therapy or, indeed, any therapeutic intervention. However, where this cannot be achieved (for example, the person is seeking treatment for their PTSD whilst maintaining a work role or domestic situation that may expose them to further trauma), some benefit may still be derived from trauma-focussed therapy. This should follow careful assessment of the person's coping resources and available support.

Treatment Goals

GPP21 - The practitioner should assess immediate needs for practical and social support and provide education and referrals accordingly.

GPP22 - Appropriate goals of treatment should be tailored to the unique circumstances and overall mental health care needs of the individual and established in collaboration with the person.

GPP23 - From the outset, there should be a collaborative focus on recovery and rehabilitation between the person and practitioner, and where appropriate, family members.

Cultural and Linguistic Diversity

GPP24 - Recommended treatments for PTSD should be available to all Australians, recognising their different cultural and linguistic backgrounds.

RR1 - The conceptualisation of psychological trauma in different and diverse cultural contexts needs to be further researched so that this can inform processes of assessment and management of such trauma syndromes for people of culturally and linguistically diverse backgrounds.

The Impact of PTSD on Family

GPP25 - Wherever possible family members should be included in education and treatment planning, and their own needs for care considered alongside the needs of the person with PTSD.

General Professional Issues

GPP26 - Practitioners who provide mental health care to children, adolescents or adults with acute stress disorder (ASD) and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications.

GPP27 - Primary care practitioners, especially in rural and remote areas, who assume responsibility for the care of people with ASD and PTSD in the absence of specialist providers, should be supported with accessible education and training, as well as access to specialist advice and supervision where possible.

GPP28 - In their self-care, practitioners should pay particular attention to skill and competency development and maintenance including regular supervision, establishing and maintaining appropriate emotional boundaries with people with PTSD, and effective self-care. This includes maintaining a balanced and healthy lifestyle and responding early to signs of stress.

GPP29 - For those practitioners who work in an organisational context, broader policies and practices should support individual practitioners in these self-care measures.

RR2 - In recognition of the developing science around dissemination and implementation of evidence-based treatment, future research should explore the most effective ways of generating reliable and sustainable change in policies and practice for areas covered in these Guidelines.

General Considerations When Working with Children and Adolescents

Assessment

GPP30 - Questions about exposure to commonly experienced potentially traumatic events should be included as standard during any psychiatric assessment of children and adolescents. If such exposure is endorsed, the child should be screened for the presence of PTSD symptoms.

GPP31 - Children and adolescents are typically dependent upon an adult to present them for assistance. This means that it is equally important to

engage with and maintain the relevant adults' motivation to pursue assistance, as it is the child or adolescents.

GPP32 - Assessment of children and adolescents should include assessment of the system (typically the family) in which they live, as their symptoms will both influence and be influenced by what else is happening within the system.

GPP33 - The rate of agreement between parents/caregivers and children in relation to internalising symptoms of posttraumatic mental health problems may be very low. Practitioners should not rely solely on an adult's report of a child's internalising symptoms – even if the child is preschool-aged. Where assessment involves very young children (aged 0 to 3) this should include an evaluation of the behaviour of the child with particular reference to developmental stage, and attachment status. Some symptoms of PTSD such as sense of foreshortened future and inability to recall some aspects of the trauma are unlikely to be usefully assessed in this age group.

GPP34 - In children, the range of potential posttraumatic mental health problems includes behavioural and attentional problems (such as oppositional defiant disorder and attention deficit hyperactivity disorder) as well as anxiety disorders (such as separation anxiety disorder) and affective disorders.

GPP35 - For children and adolescents, a structured clinical interview is regarded as a better assessment measure than a questionnaire for making a diagnosis.

Intervention Planning

GPP36 - As noted in reference to assessment, children and adolescents are typically dependent upon an adult to present them for treatment and ensure that they attend subsequent appointments. This means that it is equally important to engage with and maintain the relevant adults' motivation to pursue treatment, as it is the child or adolescent's.

GPP37 - For children and adolescents, treatment needs to be tailored to meet the developmental needs of the individual. Protocols that have been designed specifically for children and adolescents should be used in preference to attempting to modify an adult treatment protocol.

GPP38 - When the adult caregiver of a child with PTSD is also experiencing posttraumatic mental health problems, their symptoms may exacerbate each other's. For this reason, it may be preferable to treat the caregiver first or in parallel.

GPP39 - In the treatment of children and adolescents, parents/caregivers need to be involved to some degree, not only because of their gatekeeper role in terms of access to and continued engagement in therapy, but also because of their role in helping to generalise and maintain treatment gains, direct participation in homework tasks (e.g., reward systems), and providing important information that the child may have forgotten, be unaware of, or not recognise the importance of.

GPP40 - The delivery of services in schools may be an effective strategy for engaging and keeping children, adolescents and families in treatment.

GPP41 - Parent/caregiver involvement in assessment and treatment is desirable for children and adolescents with ASD or PTSD.

GPP42 - Practitioners who provide mental health care to children, adolescents or adults with ASD and PTSD, regardless of professional background, must be appropriately trained to ensure adequate knowledge and competencies to deliver recommended treatments. This requires specialist training, over and above basic mental health or counselling qualifications.

Evidence Review and Treatment Recommendations

GPP43 - Best practice procedures should be adopted when using psychological, psychosocial or pharmacological treatments, including provision of information prior to commencement, monitoring and management of side effects, monitoring of suicide risk, and in the case of pharmacological intervention, appropriate discontinuation and withdrawal practices.

Early Psychological Interventions for Adults

Pre-incident Preparedness Training

CP1 - For adults likely to be exposed to a potentially traumatic event, pre-incident preparedness training may facilitate psychological adaptation following the event.

RR3 - There is an urgent need for carefully controlled research to study the content and possible benefits of preparedness training prior to trauma exposure.

Early Psychological Interventions for All

R1 - For adults exposed to a potentially traumatic event, a one-session, structured, psychological intervention in the acute phase, such as

psychological debriefing, should not be offered on a routine basis for the prevention of PTSD. (Grade B)

GPP44 - For adults exposed to a potentially traumatic event, if required, provide practical and emotional support, facilitate ways to manage distress and access social supports, and promote positive expectations.

GPP45 - Adults exposed to a potentially traumatic event who wish to discuss the experience, and demonstrate a capacity to tolerate associated distress, should be supported in doing so. In doing this the practitioner should keep in mind the potential adverse effects of excessive ventilation in those who are very distressed.

GPP46 - For adults exposed to a potentially traumatic event, a stepped care approach tailored to individual need is advised. This would involve ongoing monitoring of people who are more distressed and/or at heightened risk of adverse mental health impact, with targeted assessment and intervention when indicated.

GPP47 - For adults who develop an extreme level of distress or are at risk of harm to self or others, thorough diagnostic assessment and appropriate interventions should be provided.

RR4 - In view of the importance of providing a best practice response for adults exposed to a potentially traumatic event for high risk industries and for the general community, future research should examine the most effective strategy to adopt for all those exposed to a traumatic event.

Psychological Treatment for Adults with ASD or Acute PTSD

R2 - For adults displaying symptoms consistent with ASD or PTSD in the initial four weeks after a potentially traumatic event, individual trauma-focussed cognitive behavioural therapy including exposure and/or cognitive therapy, should be considered if indicated by a thorough clinical assessment. (Grade C)

Psychological Interventions for Adults with PTSD

R3 - Adults with PTSD should be offered trauma-focussed cognitive behavioural interventions or eye movement desensitization and reprocessing. (Grade A)

R4 - Where symptoms have not responded to a range of trauma-focussed interventions, evidence-based non-trauma-focussed psychological interventions (such as stress inoculation training) should be considered. (Grade D)

CP2 - On the basis of some evidence that *in vivo* exposure (graded exposure to feared/avoided situations) contributes to treatment gains, it is recommended that *in vivo* exposure be included in treatment.

GPP48 - Where symptoms have not responded to one form of first line trauma-focussed intervention (trauma-focussed cognitive behavioural therapy or eye movement desensitisation and reprocessing), health practitioners may consider the alternative form of trauma-focussed intervention.

GPP49 - For adults with PTSD with several problems arising from multiple traumatic events, traumatic bereavement, or where PTSD is chronic and associated with significant disability and comorbidity, sessions using specific treatments to address those problems may be required.

GPP50 - Where adults have developed PTSD and associated features following exposure to prolonged and/or repeated traumatic events, more time to establish a trusting therapeutic alliance and more attention to teaching emotional regulation skills may be required.

GPP51 - Prescribed medication can continue while people are undertaking psychological treatments and any changes should only occur in close consultation with the treating physician. However, some medications, such as benzodiazepines, may interfere with some effective psychological treatments.

GPP52 - Sessions that involve imaginal exposure may require up to 90 minutes to avoid premature termination of therapy while anxiety is still high, and to ensure appropriate management of distress.

RR5 - Mechanisms underpinning effective treatments should be subject to systematic research.

RR6 - There should be large and well-controlled trials of new and emerging interventions for PTSD.

RR7 - Further research is required that evaluates the extent to which treatments with demonstrated efficacy are effective when delivered by non-specialist practitioners in real-world settings. The focus of research should not be restricted to outcomes only, but should also include factors such as cost-effectiveness, acceptability for practitioners and clients, treatment fidelity, and success of practitioner training.

Individual vs. Group Therapy

R5 - Group cognitive behavioural therapy (trauma-focussed or non-trauma-focussed) may be provided as adjunctive to, but not be considered an alternative to, individual trauma-focussed therapy. (Grade C)

Self-delivered Interventions

R6 - Internet-delivered trauma-focussed therapy involving trauma-focussed cognitive behavioural therapy may be offered in preference to no intervention. (Grade C)

Early Pharmacological Interventions for Adults

Early Pharmacological Interventions for All

R7 - For adults exposed to a potentially traumatic event, drug treatments should not be used for all those exposed as a preventive intervention. (Grade C)

GPP53 - Where significant sleep disturbance does not settle in response to reassurance, sleep hygiene and appropriate psychological interventions, cautious and time-limited use of appropriate sleep medication may be helpful for adults.

Pharmacological Treatment for Adults with ASD or Acute PTSD

R8 - The routine use of pharmacotherapy to treat ASD or early PTSD (i.e., within four weeks of symptom onset) in adults is not recommended. (Grade D)

GPP54 - Pharmacotherapy may be indicated if the severity of the person's distress cannot be managed by psychological means alone, particularly when there is a pattern of extreme hyperarousal, sleep disturbance or nightmares.

GPP55 - For people who have a prior psychiatric history that has responded well to medication, the prescription of an appropriate medication should be considered if a progressive pattern of clinically significant symptoms, such as persistent intrusions with increasing affective distress, begin to emerge.

GPP56 - For adults with ASD or early PTSD, where significant sleep disturbance does not settle in response to reassurance, sleep hygiene and appropriate psychological interventions, cautious and time-limited use of appropriate sleep medication may be helpful.

RR8 - The effect of pharmacological treatment of ASD on subsequent PTSD status and severity following cessation of medication should be investigated. These studies may go beyond common psychotropic medication to include other agents that have shown promise such as narcotic analgesics, cortisol, and alcohol.

Pharmacological Interventions for Adults with PTSD

R9 - Drug treatments for PTSD should not be preferentially used as a routine first treatment for adults, over trauma-focussed cognitive behavioural therapy or eye movement desensitisation and reprocessing. (Grade B)

R10 - Where medication is considered for the treatment of PTSD in adults, selective serotonin reuptake inhibitor antidepressants should be considered the first choice. (Grade C)

GPP57 - Selective serotonin reuptake inhibitor antidepressant medication should be considered for the treatment of PTSD in adults when:

- The person is unwilling or not in a position to engage in or access trauma-focussed psychological treatment
- The person has a comorbid condition or associated symptoms (e.g., severe depression and high levels of dissociation) where selective serotonin reuptake inhibitors are indicated
- The person's circumstances are not sufficiently stable to commence trauma-focussed psychological treatment (as a result, for example, of severe ongoing life stress such as domestic violence)
- The person has not gained significant benefit from trauma-focussed psychological treatment

GPP58 - Where a decision has been made to commence pharmacotherapy, the person's mental state should be regularly monitored with a view to commencing adjunctive psychological treatment if/when appropriate. In the interim, supportive psychotherapy with a substantial psychoeducational component should be offered.

GPP59 - Where significant sleep disturbance or excessive distress does not settle in response to reassurance, sleep hygiene and evidence-based psychological interventions, or other non-drug intervention, cautious and time-limited use of appropriate sleep medication may be helpful. If the sleep disturbance is of more than one month's duration and medication is likely to be of benefit in the management of the person's PTSD, a suitable

antidepressant should be considered. The risk of tolerance and dependence are relative contraindications to the use of hypnotics for more than one month except if their use is intermittent.

GPP60 - Where symptoms have not responded adequately to pharmacotherapy, further consultation with a specialist in the field should be undertaken to determine the appropriateness of:

- Increasing the dosage within approved limits
- Switching to an alternative antidepressant medication
- Adding prazosin, risperidone or olanzapine as an adjunctive medication
- Reconsidering the potential for psychological intervention

GPP61 - When an adult with PTSD has responded to drug treatment without experiencing any adverse effects, it should be continued for at least 12 months before gradual withdrawal.

RR11 - Given the extent to which adjunctive pharmacotherapy is used in routine clinical practice, particularly with chronic and treatment-resistant cases, it is recommended that large, well-controlled trials be conducted to clarify the benefits of multiple medications.

RR12 - Since preliminary evidence suggests that a range of medications may enhance psychological treatments, future research should further investigate this question.

RR13 - Further exploration is required of the potential benefits of combination and sequencing (pharmacological and trauma-focussed psychological) treatments.

RR14 - Future research should explore neurobiological and psychological markers that may be used in predicting likely treatment response. This research recommendation applies equally to pharmacological and psychological interventions.

Psychosocial Rehabilitation

CP3 - Adult refugees with PTSD who have experienced war and famine may benefit from appropriate psychosocial support groups. (Note that a broader discussion of the application of these Guidelines for refugee and asylum seeker populations is included in the "Specific populations" chapter in the original guideline document).

GPP62 - There should be a focus on vocational, family, and social rehabilitation interventions from the beginning of treatment to prevent or reduce disability associated with the disorder, and to promote recovery, community integration and quality of life.

GPP63 - In cases where people with PTSD have not benefited from a number of courses of evidence-based treatment, psychosocial rehabilitation interventions should be considered to prevent or reduce disability, and to promote recovery, community integration and quality of life.

GPP64 - Health care and rehabilitation professionals should be aware of the potential benefits of psychosocial rehabilitation and promote practical advice on how to access appropriate information and services.

GPP65 - In cases of work-related trauma, management of any return-to-work process needs to occur in the context of a thorough risk assessment of the potential for exposure to further stressors, balanced with the potential benefits of return to work.

RR9 - In adults with PTSD the impact of psychosocial rehabilitation on PTSD and social and occupational functioning should be investigated.

Exercise and Physical Therapies

R11 - Acupuncture may be considered as a potential intervention for PTSD for people who have not responded to trauma-focussed psychological therapy or pharmacotherapy. (Grade D)

GPP66 - As part of general mental health care, practitioners may wish to advise people with PTSD that regular aerobic exercise can be helpful in managing their symptoms and as part of self-care practices more generally. Exercise may assist in the management of sleep disturbance and somatic symptoms that are common accompaniments of PTSD.

RR10 - Further research is needed into the effect of physical and exercise based interventions on PTSD.

Single vs. Multiple Interventions

GPP67 - Psychosocial rehabilitation interventions should be used as an adjunctive therapy in combination with psychotherapy or pharmacotherapy.

RR15 - Large, well-controlled randomised trials comparing pharmacological with trauma-focussed psychological treatment across different trauma populations are required. This may be best achieved through coordinated international multi-site trials.

Sequencing Comorbidities

CP4 - In the context of comorbid PTSD and mild to moderate depression, health practitioners may consider treating the PTSD first, as the depression will often improve with treatment of the PTSD.

CP5 - Where the severity of comorbid depression precludes effective engagement in therapy and/or is associated with high risk suicidality, health practitioners are advised to manage the suicide risk and treat the depression prior to treating the PTSD.

CP6 - In the context of PTSD and substance use disorders, practitioners should consider integrated treatment of both conditions.

CP7 - In the context of PTSD and substance use disorders, the trauma-focussed component of PTSD treatment should not commence until the person has demonstrated a capacity to manage distress without recourse to substance misuse and to attend sessions without being drug or alcohol affected.

CP8 - In the context of PTSD and substance use disorders, where the decision is made to treat substance use disorders first, clinicians should be aware that PTSD symptoms may worsen due to acute substance withdrawal or loss of substance use as a coping mechanism. Treatment should include information on PTSD and strategies to deal with PTSD symptoms as the person controls their substance abuse.

Early Psychological Interventions for Children and Adolescents

Early Psychological Interventions for All

R12 - For children exposed to a potentially traumatic event, psychological debriefing should not be offered. (Grade B)

GPP68 - Children, ranging from infants and pre-schoolers to older children and adolescents can be affected significantly by traumatic events, at higher rates than adults. Practitioners need to be conscious of this risk, must be proactive in assessing the range of psychological impacts of trauma, and should be prepared to provide appropriate assistance, including referral to specialist services if needed.

GPP69 - Information is often provided to assist children following traumatic events. The content, when used, should be of high quality and tailored to the traumatic event type and the target audience. Information given following traumatic events may include: a) information about likely outcomes (most frequently positive); b) reinforcement of existing and new positive coping; c) advice on avenues for seeking further assistance if required; and d) possible indicators of a need for further assistance. Information following traumatic events may also include a recognition of the role of, and impact on, caregivers, siblings and teachers.

GPP70 - For children exposed to trauma, psychoeducation should be integrated into a stepped-care approach that involves parents and the range of health, education and welfare service providers, and includes monitoring, targeted assessment and intervention, if necessary.

GPP71 - Psychological first aid may be appropriate with children in the immediate aftermath of trauma; however, if it is used there must be access available to infant, child and adolescent mental health specialists if and when required.

GPP72 - Parents and caregivers provide a protective/buffering function against child traumatic stress. Clinicians should be aware of the potential for parents' own distress or other factors to compromise their capacity to provide a protective/buffering function. If distress or other relevant factors are identified, the clinician should respond accordingly.

RR16 - Research across a range of trauma-exposed child and adolescent populations is needed to improve understanding of the role and effectiveness of early intervention.

Early Psychological Interventions for Children and Adolescents with ASD or Acute PTSD

CP9 - Trauma-focussed cognitive behavioural therapy may be useful as an early psychological intervention for children with a diagnosis of ASD in the initial four weeks after the traumatic event, based on the positive evidence for cognitive behavioural therapy in children with PTSD. However, the effectiveness of this approach with ASD in children is not yet established.

Psychological Interventions for Children and Adolescents with PTSD

R13 - For children of school age and above with PTSD, developmentally appropriate trauma-focussed cognitive behavioural therapy should be considered. (Grade C)

GPP73 - When assessing a child or adolescent for PTSD, healthcare professionals should ensure that they separately and directly assess the child

or adolescent for the presence of PTSD symptoms. It is preferable not to rely solely on information from the parent or guardian in any assessment.

GPP74 - Given that retention in therapy and the effectiveness of trauma-focussed cognitive behavioural therapy with children and adolescents both require strong parent and/or caregiver involvement, an initial phase of trauma-focussed cognitive behavioural therapy with this group is engagement of the parent(s) to improve their understanding and support of this treatment modality.

RR17 - The effectiveness of trauma-focussed cognitive behavioural therapy on depression and other post traumatic presentations (internalising and externalising behaviours) requires further investigation.

RR18 - The guideline authors recommend that further research examining eye movement desensitisation and reprocessing for PTSD in children is conducted.

RR20 - The impact of treatment of trauma-related psychopathology in parents and/or caregivers of abused children prior to treatment of the children should be explored.

Individual vs. Group Therapy

R14 - For children with PTSD, individual psychological interventions should be considered in preference to group interventions. (Grade C)

Early Pharmacological Interventions for Children and Adolescents

R15 - For children exposed to a potentially traumatic event, pharmacotherapy should not be used as a preventive intervention for all those exposed. (Grade D)

Pharmacological Interventions for Children and Adolescents with PTSD

R16 - For children and adolescents with PTSD, pharmacotherapy should not be used as a routine first treatment over trauma-focussed cognitive behavioural therapy. (Grade D)

R17 - For children and adolescents with PTSD, pharmacotherapy should not be used routinely as an adjunct to trauma-focussed cognitive behavioural therapy. (Grade D)

GPP75 - Prescription of antidepressants in children should be guided by specific practice guidelines on depression, and practitioners should be aware of age-related side effects.

School-based Interventions

R18 - For children exposed to trauma with symptoms of PTSD, where they were exposed to the same event, a school-based trauma-focussed cognitive-behavioural intervention aimed at reducing symptoms of PTSD should be considered. (Grade C)

GPP76 - An integrated model between education and health providers that facilitates appropriate support and referral is recommended. It is recommended that schools provide a facilitative function in intervening with children following trauma, especially after large-scale traumas.

RR19 - There is a need to understand how the impact of trauma presents for children in schools, and the role of the school community in providing support to affected children and assisting in referral if required.

Definitions

Grades of Recommendation

A: Body of evidence can be trusted to guide practice

B: Body of evidence can be trusted to guide practice in most situations

C: Body of evidence provides some support for recommendation(s) but care should be taken in its application

D: Body of evidence is weak and recommendation(s) must be applied with caution

There are many areas of clinical practice for which there is simply no research evidence available. Rather than provide no guidance in these areas, the working party generated Consensus Points (CP – used when a research question was asked of the data, but no evidence was forthcoming) and Good Practice Points (GPP – used when the research question was not asked; this was often because the working party was confident that no evidence existed). Areas identified as in need of further research are noted as Research Recommendations (RR).

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Acute stress disorder (ASD) and posttraumatic stress disorder (PTSD)

Note: The guidelines do not seek to address the full range of possible responses to traumatic exposure, including those known as Complex PTSD or Disorders of Extreme Stress Not Otherwise Specified (DESNOS).

Guideline Category

Counseling

Diagnosis

Evaluation

Management

Screening

Treatment

Clinical Specialty

Emergency Medicine

Family Practice

Internal Medicine

Pediatrics

Psychiatry

Psychology

Intended Users

Advanced Practice Nurses

Emergency Medical Technicians/Paramedics

Health Care Providers

Nurses

Patients

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Public Health Departments

Social Workers

Utilization Management

Guideline Objective(s)

- To provide recommendations on the best interventions for children, adolescents and adults who have been exposed to potentially traumatic events as well as those who have developed acute stress disorder (ASD) or posttraumatic stress disorder (PTSD)
- To support high quality treatment for children, adolescents and adults with ASD and PTSD by providing a framework of best practice around which to structure treatment

Target Population

All Australians, across the full range of ages and populations, who develop or are at risk of developing forms of distress that are generally consistent with the criteria for acute stress disorder (ASD) and posttraumatic stress disorder (PTSD) following traumatic events

Interventions and Practices Considered

Screening/Evaluation/Diagnosis

1. Screening (case finding) for posttraumatic stress disorder (PTSD)
2. Choice of screening tools and screening procedures
3. Comprehensive assessment and monitoring of PTSD during treatment
4. Use of validated self-report and structured clinical interview measures during assessment
5. Recognition of comorbidities during assessment
6. Consideration of family systems, especially when assessing children and adolescents

Management/Treatment

1. Intervention planning
2. Psychological debriefing (not recommended)
3. Establishing treatment goals
4. Recognition of cultural and linguistic diversity
5. Appropriate training of practitioners who care for people with acute stress disorder (ASD) and PTSD
6. Stepped care approach
7. Psychological interventions
    - Trauma-focussed cognitive behavioural therapy
    - Cognitive processing therapy
    - Exposure
    - Eye movement desensitisation and reprocessing
    - Stress inoculation training
    - *In vivo* exposure
    - Individual versus group therapy
    - Internet-delivered trauma-focussed cognitive behavioural therapy
8. Pharmacological treatment
    - Selective serotonin reuptake inhibitor (SSRI) antidepressants
    - Sleep medication
9. Specialty consultation if lack of response to therapy (e.g., to consider dosage change or addition of another antidepressant or antipsychotic medication)
10. Psychosocial rehabilitation
11. Aerobic exercise and physical therapies including acupuncture

12. Single versus multiple intervention
13. Treating comorbidities including depression and substance use disorders
14. Special considerations for children and adolescents, including school-based interventions

Major Outcomes Considered

- Symptoms of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD)
- Symptoms of depression, anxiety, and substance misuse
- Social and occupational function
- Quality of life
- Treatment refusal
- Dropout over 12 months
- Posttraumatic growth
- Physical comorbidity
- Side effects
- Additional outcomes for children: attention deficit hyperactivity disorder, conduct disorder, oppositional defiant disorder, attachment reactive disorder, social anxiety disorder

Methodology

Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic literature review was performed by Adelaide Health Technology Assessment (AHTA), University of Adelaide, for the Phoenix Australia – Centre for Posttraumatic Mental Health. The full systematic review is provided as Appendix 3 to the guideline (see the "Availability of Companion Documents" field).

Overview of Methodology

The systematic review was designed to update the systematic review conducted for the 2007 Australian Guidelines for the Treatment of Adults with acute stress disorder (ASD) and posttraumatic stress disorder (PTSD). That review, and the current review, were both undertaken by Adelaide Health Technology Assessment (AHTA). The 2007 review included studies identified in the National Institute for Health and Care Excellence (NICE) guidelines and the U.S. Veterans Affairs/Department of Defense (VA/DoD) guidelines. The current review also included the studies identified in that previous systematic review where the research questions were the same, provided they met the inclusion criteria. The current review also reviewed the research on a broader range of questions and included children and adolescents for the first time.

Inclusion Criteria

Criteria for including studies in the updated systematic literature review are provided in Appendix 3 in the original guideline document. In order to ensure that the selection of studies to answer specific research questions was not biased, these criteria were delineated prior to collating the literature. The type of patient Population, Intervention (treatment), Comparator (against which the treatment's effectiveness is measured), and Outcomes of interest were made explicit – these are known as the PICO criteria and they relate directly to the research question that is being addressed. Additional limits to the literature search were also made clear, such as restricting the search to studies of a certain research design(s) (e.g., likely to provide unbiased or more reliable results), to a certain search period, or a certain language.

Studies were excluded if they:

- Did not meet the inclusion criteria
- Could not provide adequate data on the outcomes (e.g., data only provided in graphical format, missing information, format or type of data are unable to be used)
- Were updated by the same research group on the same research question for the same patients, with no different information provided
- Could not be located
- Used an analogue for a traumatic event (e.g., student convenience samples)

Studies assessing the benefits of interventions in adults were included if:

- PTSD symptoms were measured
- The main target of the treatment was ASD or PTSD, or preventing the development of these disorders
- For questions pertaining to PTSD, at least 70 per cent of the participants have PTSD, and the remaining participants have symptoms of PTSD following a traumatic event
- For continuous data, at least 50 per cent of the intent-to-treat sample were assessed at the relevant time point

The inclusion criteria for children and adolescents were the same as for adults, except the inclusion criteria that 70 per cent of participants within a study require PTSD was not applied, as the diagnostic criteria for child and adolescent PTSD is still evolving and relatively undeveloped. All studies, however, were required to include a measure of the child's PTSD symptoms.

Literature Sources

To be consistent with the evidence-based guidelines documents that have gone before this one, including the NICE and VA/DoD guidelines and the previous Australian Guidelines, the following databases were searched: Medline, Exerpta Medica Database (EMBASE), PsycINFO, Cumulative Index to Nursing and Allied Health Literature (CINAHL), the Dartmouth College Published International Literature on Traumatic Stress (PILOTS) catalog and the Cochrane Library (see Table 200 in the systematic review). To meet the National Health and Medical Research Council (NHMRC) Minimum Requirements standards, Clinical Evidence and the internet (Google Scholar, and websites of specialty organisations) were also searched (see Table 201 and Appendix E in the systematic review), and the reference lists of all included studies were scanned for potentially relevant studies. The Australian and New Zealand Clinical Trials Register was searched in January 2012 and, where a relevant study was identified as being completed, the corresponding research groups were contacted to see whether they had any recently published or *in press* articles in an attempt to ensure the Guidelines were based on the most recent applicable evidence available.

Also, to be consistent with the previous evidence-based guidelines documents, the search was restricted to English language literature and to either a systematic review/meta-analysis of randomised controlled trials (level I evidence), or to randomised controlled trials (level II evidence), unless fewer than two randomised controlled trials were identified to answer a particular question, in which case lower levels of evidence were assessed for inclusion.

Search Strategies

A series of six separate searches was conducted to extract comparative studies relating to psychological interventions, pharmacological interventions, psychosocial rehabilitation, physical therapies and exercise, and comorbidities, from which relevant papers were identified for each research question. Where the question remained the same from the 2007 guidelines and no new levels of evidence were scoped in the search, the evidence derived from the previous 1996–2004 search was retained and a separate search occurred from 2005 to October 2011. However, for children and adolescents a separate search occurred from 1996 to October 2011 as they were not included in the previous search. The search terms used are listed in Table 202 of Appendix 3 in the systematic review. The search terms were developed on a PubMed platform. Similar search strategies were used for the different bibliographic databases, with the same text words being used along with the relevant alternatives to MeSH headings.

Number of Source Documents

The process of study selection went through six phases, and the number of literature citations retrieved and retained at each phase was documented (see Table 203 in the systematic review [Appendix 3 of the guideline] [see the "Availability of Companion Documents" field]). After phase 6, a total of 285 citations were retained.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Designation of Levels of Evidence According to Type of Research Question

Level	Intervention[1]	Diagnostic Accuracy[2]	Prognosis	Etiology[3]	Screening Intervention
I[4]	A systematic review of level II studies	A systematic review of level II studies	A systematic review of level II studies	A systematic review of level II studies	A systematic review of level II studies
II	A randomised controlled trial	A study of test accuracy with: an independent, blinded comparison with a valid reference standard,[5] among non-consecutive persons with a defined clinical presentation[6]	A prospective cohort study[7]	A prospective cohort study	A randomised controlled trial
III-1	A pseudo-randomised controlled trial (i.e., alternate allocation or some other method)	A study of test accuracy with: an independent, blinded comparison with a valid reference standard,[5] among consecutive persons with a defined clinical presentation[6]	All or none[8]	All or none[8]	A pseudorandomised controlled trial (i.e., alternate allocation or some other method)
III-2	A comparative study with concurrent controls: • Non-randomised, experimental trial[9] • Cohort study • Case-control study • Interrupted time series with a control group	A comparison with reference standard that does not meet the criteria required for Level II and III-1 evidence	Analysis of prognostic factors amongst persons in a single arm of a randomised controlled trial	A retrospective cohort study	A comparative study with concurrent controls: • Non-randomised, experimental trial • Cohort study • Case-control study
III-3	A comparative study without concurrent controls: • Historical control study • Two or more single arm studies[10] • Interrupted time series without a parallel control group	Diagnostic case-control study[6]	A retrospective cohort study	A case-control study	A comparative study without concurrent controls: • Historical control study • Two or more single arm study

Level IV	Intervention[1] Case series with either post-test or pre-test/post-test outcomes	Diagnostic Accuracy[2] Study of diagnostic yield (no reference standard)[11]	Prognosis Case series, or cohort study of persons at different stages of disease	Etiology[3] A cross-sectional study or case series	Screening Case series Intervention

Explanatory notes:

1. Definitions of these study designs are provided on pages 7-8 of *How to use the evidence: assessment and application of scientific evidence* (National Health and Medical Research Council. How to use the evidence: assessment and application of scientific evidence. National Health and Medical Research Council [NHMRC]: Canberra [Australia]; 2000) and in the accompanying Glossary of the Appendices to the original guideline document (see "Availability of Companion Documents" field).
2. These levels of evidence apply only to studies of assessing the accuracy of diagnostic or screening tests. To assess the overall effectiveness of a diagnostic test there also needs to be a consideration of the impact of the test on patient management and health outcomes. The evidence hierarchy given in the 'Intervention' column should be used to assess the impact of a diagnostic test on health outcomes relative to an existing method of diagnosis/comparator test(s). The evidence hierarchy given in the 'Screening' column should be used to assess the impact of a screening test on health outcomes relative to no screening or opportunistic screening.
3. If it is possible and/or ethical to determine a causal relationship using experimental evidence, then the 'Intervention' hierarchy of evidence should be utilised. If it is only possible and/or ethical to determine a causal relationship using observational evidence (e.g., cannot allocate groups to a potential harmful exposure, such as nuclear radiation), then the 'Etiology' hierarchy of evidence should be utilised.
4. A systematic review will only be assigned a level of evidence as high as the studies it contains, excepting where those studies are of level II evidence. Systematic reviews of level II evidence provide more data than the individual studies and any meta-analyses will increase the precision of the overall results, reducing the likelihood that the results are affected by chance. Systematic reviews of lower level evidence present results of likely poor internal validity and thus are rated on the likelihood that the results have been affected by bias, rather than whether the systematic review itself is of good quality. Systematic review quality should be assessed separately. A systematic review should consist of at least two studies. In systematic reviews that include different study designs, the overall level of evidence should relate to each individual outcome/result, as different studies (and study designs) might contribute to each different outcome.
5. The validity of the reference standard should be determined in the context of the disease under review. Criteria for determining the validity of the reference standard should be pre-specified. This can include the choice of the reference standard(s) and its timing in relation to the index test. The validity of the reference standard can be determined through quality appraisal of the study.
6. Well-designed population based case-control studies (e.g., population based screening studies where test accuracy is assessed on all cases, with a random sample of controls) do capture a population with a representative spectrum of disease and thus fulfil the requirements for a valid assembly of patients. However, in some cases the population assembled is not representative of the use of the test in practice. In diagnostic case-control studies a selected sample of patients already known to have the disease are compared with a separate group of normal/healthy people known to be free of the disease. In this situation patients with borderline or mild expressions of the disease, and conditions mimicking the disease are excluded, which can lead to exaggeration of both sensitivity and specificity. This is called spectrum bias or spectrum effect because the spectrum of study participants will not be representative of patients seen in practice.
7. At study inception the cohort is either non-diseased or all at the same stage of the disease. A randomised controlled trial with persons either non-diseased or at the same stage of the disease in both arms of the trial would also meet the criterion for this level of evidence.
8. All or none of the people with the risk factor(s) experience the outcome; and the data arises from an unselected or representative case series which provides an unbiased representation of the prognostic effect. For example, no smallpox develops in the absence of the specific virus; and clear proof of the causal link has come from the disappearance of small pox after large scale vaccination.
9. This also includes controlled before-and-after (pre-test/post-test) studies, as well as adjusted indirect comparisons (i.e., utilise A vs. B and B vs. C, to determine A vs. C with statistical adjustment for B).
10. Comparing single arm studies, i.e., case series from two studies. This would also include unadjusted indirect comparisons (i.e., utilise A vs. B and B vs. C, to determine A vs. C but where there is no statistical adjustment for B).
11. Studies of diagnostic yield provide the yield of diagnosed patients, as determined by an index test, without confirmation of the accuracy of this diagnosis by a reference standard. These may be the only alternative when there is no reliable reference standard.

Note A: Assessment of comparative harms/safety should occur according to the hierarchy presented for each of the research questions, with the proviso that this assessment occurs within the context of the topic being assessed. Some harms (and other outcomes) are rare and cannot feasibly be captured within randomised controlled trials, in which case lower levels of evidence may be the only type of evidence that is practically achievable; physical harms and psychological harms may need to be addressed by different study designs; harms from diagnostic testing include the likelihood of false positive and false negative results; harms from screening include the likelihood of false alarm and false reassurance results.

Note B: When a level of evidence is attributed in the text of a document, it should also be framed according to its corresponding research question, e.g., level II intervention evidence; level IV diagnostic evidence; level III-2 prognostic evidence.

Note C: Each individual study that is attributed a "level of evidence" should be rigorously appraised using validated or commonly used checklists or appraisal tools to ensure that factors other than study design have not affected the validity of the results.

Methods Used to Analyze the Evidence

Meta-Analysis of Randomized Controlled Trials

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): A systematic literature review was performed by Adelaide Health Technology Assessment (AHTA), University of Adelaide, for the Phoenix Australia – Centre for Posttraumatic Mental Health. The full systematic review is provided as Appendix 3 to the guideline (see the "Availability of Companion Documents" field).

Validity Assessment

All studies identified through the new searches, and those identified through the previous reviews (Adelaide Health Technology Assessment [AHTA], National Institute for Health and Care Excellence [NICE] and U.S. Veterans Affairs/Department of Defense [VA/DoD]) were critically appraised – in terms of internal and external validity - and the statistical and clinical relevance and applicability of results were determined utilising the National Health and Medical Research Council (NHMRC) dimensions of evidence and the recently developed NHMRC interim levels and grades of evidence (see the "Rating Scheme for the Strength of the Evidence" field). Critical appraisal of the included systematic reviews, and randomised trials was performed using the NHMRC quality checklist (see Appendix B of the systematic review). The checklist for appraising the quality of intervention studies was determined to be aimed towards features of randomised trials. Only those trials which reported a correct, blinded randomisation method, and high rates of follow up with intention to treat analyses conducted, were considered to be low in bias, which was applicable to very few studies identified in the systematic review, resulting in the majority of studies being considered to be at moderate or high risk of bias. For cohort studies, a protocol amendment was made, and a checklist by Downs and Black was used (Appendix B of the systematic review).

Publication bias was assessed using funnel plots. Comparisons within the review with three or more studies were assessed for publication bias on the primary outcomes (posttraumatic stress disorder [PTSD] diagnosis and severity).

The NHMRC dimensions of evidence consider three main aspects that are critical to an assessment of evidence: strength of the evidence, size of the effect and relevance of the evidence. The first domain is derived directly from the literature identified as informing a particular intervention. The last two require expert clinical input as part of their determination.

Data Extraction and Analysis

The process of study selection went through six phases, and the number of literature citations retrieved and retained at each phase was documented (see Table 203 of the systematic review).

Evidence tables were used as a guide to summarise the extraction of data from the individual studies (see Appendix G of the systematic review) Intention-to-treat analyses should be used in preference to completer data as they limit the effect of selection bias on the results. Therefore, intention-to-treat data was used in preference to completer data, when it was available. However, when such data was not available, completer data was used.

Meta-analyses for specific research questions were conducted originally in the NICE guidelines document and updated where appropriate in the previous Phoenix Australia – Centre for Posttraumatic Mental Health Guidelines. These meta-analyses were again updated, where appropriate, using the results of the new randomised controlled trials identified for this report. Meta-analyses were conducted using a fixed effects model when studies were homogenous ($p>0.05$), or a random effects model in the presence of between-study heterogeneity (where that heterogeneity could not be explained). Effect measures that were extracted or calculated for individual or pooled results included relative risk (RR; for count data) and standardised mean differences (SMD; Hedges g) for continuous data. As per the methodology used by NICE, mean post-treatment scores (or follow-up scores) were combined with mean change-from-baseline scores, where the scores were on the same outcome measure.

It should be noted that the SMD method does not correct for differences in the direction of the scale. For meta-analyses where some scales increase with disease severity whilst others decrease, the mean values from one set of studies were multiplied by –1 to ensure that all the scales point in the same direction. Heterogeneity in the meta-analysis was assessed using the Cochran Q statistic, and publication bias was tested using the Begg funnel plot. Where a meta-analysis could not be conducted, a qualitative synthesis of the data was undertaken.

Effect sizes were interpreted using methodology developed by NICE (see below) and NHMRC designations of level of evidence were used (see the "Rating Scheme for the Strength of the Evidence" field):

> For each outcome a clinical statement describing the evidence found was developed. To assess clinical importance where a statistically significant summary was obtained (after controlling for heterogeneity), the Group set thresholds for determining clinical importance, in addition to taking into account the trial population and nature of the outcome.
> Two separate thresholds for determining clinical importance were set. For comparisons of one active treatment against waiting list or non-active interventions, a higher threshold was applied than for comparisons of active treatments against one another.
>
> For comparisons of one active treatment against another treatment, the following thresholds were applied: for dichotomous outcomes an RR of 0.80 or less/1.25 or more was considered clinically important, and for continuous outcomes an effect size of approximately 0.5 (a 'medium' effect size; Cohen, 1988) or more (or less than -0.5) was considered clinically important.
>
> For comparisons of active treatment against waiting list, the following thresholds were applied: for dichotomous outcomes an RR of 0.65 or less/1.53 or more was considered clinically important, and for continuous outcomes an effect size of approximately 0.8 (a 'large' effect size; Cohen, 1988) or more (or less than -0.8) was considered clinically important.
>
> In cases where the point estimate of the effect was judged clinically important, a further consideration was made about the precision of the evidence by examining the range of estimates defined by the CI (confidence interval). Where the effect size was judged clinically important for the full range of plausible estimates, the result was described as *evidence* favouring intervention *x* over intervention *y* (i.e., statement 1, or S1). In situations where the point estimate was clinically important but the CI included clinically unimportant effects, the result was described as *limited evidence* favouring intervention *x* over intervention *y* (i.e., S2). Where a point estimate was judged as *not* clinically important and the CI did not include any clinically important effects, the result was described as *unlikely to be clinically important* (i.e., S3). Alternatively, if the range of estimates defined by the CI included clinically important benefits as well as no effect or harmful effects, the result was described as *inconclusive* (i.e., S4).
>
> S1= There is evidence favouring x over y on…
>
> S2= There is limited evidence favouring x over y on…
>
> S3= There is evidence suggesting that there is unlikely to be a clinically important difference between x and y on…
>
> S4= The evidence is inconclusive and so it is not possible to determine whether there is a clinically important difference between x and y on….
>
> Adapted from National Institute for Health and Care Excellence. Post-traumatic stress disorder (PTSD): the management of PTSD in adults and children in primary and secondary care (Clinical guideline; no. 26). London (UK): National Institute for Clinical Excellence; 2005. 45 p.

The same approach to data extraction and analysis was adopted for all trials reviewed for the guidelines, regardless of the nature of intervention. It is acknowledged that this renders direct comparisons between studies of psychological interventions and studies of pharmacological interventions difficult, since they tend to use different control groups. (If such comparisons are of interest, the best approach is a 'head to head' design; regrettably, few such studies exist at this point). Nevertheless, it is the most defensible approach and is routinely used in systematic reviews of this kind. Further discussion of some of these complexities appears in the "Summary of the literature" subsection of the "Pharmacological interventions for adults with PTSD" section in the original guideline document.

All statistical calculations and testing were undertaken using the biostatistical computer package Stata version 12.0. Calculations of effect sizes (Hedges g) for individual studies were performed using The Effect Size Generator version 4.1.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Note from the National Guideline Clearinghouse (NGC): A systematic literature review was performed by Adelaide Health Technology Assessment (AHTA), University of Adelaide, for the Phoenix Australia – Centre for Posttraumatic Mental Health. The full systematic review is provided as Appendix 3 to the guideline (see the "Availability of Companion Documents" field).

Personnel

The Guideline Development Group was made up of three committees:

- A small core working party, comprising clinical and research experts in the field of traumatic stress
- A broad multidisciplinary panel, comprising representatives of providers, professional associations, and people affected by trauma
- A two-person steering committee, comprising the Director, Australian Centre for Phoenix Australia – Centre for Posttraumatic Mental Health and the Chair of the working party and multidisciplinary panel

Adelaide Health Technology Assessment (AHTA) at the University of Adelaide is an external organisation with specific expertise in the conduct of systematic literature reviews. AHTA was engaged to undertake the systematic review of the literature.

The Guideline Development Group was supported by an independent methodologist, who was responsible for advising the Guideline Development Group on issues related to the National Health and Medical Research Council (NHMRC) requirements, particularly in relation to deriving recommendations from the systematic review and grading those recommendations.

The Guideline Development Group was also supported by the Australian Centre for Posttraumatic Mental Health (ACPMH) project team, who were responsible for coordinating the development and writing of the Guidelines.

Process

The working party and multidisciplinary panel worked in collaboration to establish the research questions for the systematic review of the literature, and to develop the recommendations arising from the literature review. With respect to the research questions, the working party drafted questions based on their knowledge of key questions for the field. The multidisciplinary panel provided feedback on the relevance and applicability of the draft questions to the stakeholders they represented. The agreed questions were then put to the systematic review of the literature, undertaken by AHTA. The AHTA report summarised the research evidence under each research question for consideration by the Guideline Development Group.

The process for developing recommendations involved four stages. First, evidence contained in the systematic review was allocated to working party members based on their particular expertise and working party members were required to work in pairs to develop draft recommendations. Secondly, these draft recommendations were presented to others, including the independent methodologist, at a working party meeting. The methodologist ensured that the recommendations and their grading could be justified. Thirdly, the draft recommendations were circulated to the multidisciplinary panel for feedback on their relevance and applicability to the stakeholders they represented. Finally, the Chair of the working party led a process of formally voting on acceptance of each of the recommendations. Working party members with potential conflicts of interest were excluded from the vote on specific recommendations related to the conflict. In this process one significant difference of opinion arose. A member of the multidisciplinary panel objected to the inclusion of a good practice point (GPP) that indicated that eye movements per se had not been proven to have any active effect in the efficacy of eye movement desensitisation and reprocessing (EMDR). A vote was taken within the working party in relation to this issue and it was agreed that this GPP should be removed as the question of mechanisms of treatment had not been specifically addressed in the evidence review nor addressed in the recommendations pertaining to any other intervention. One member of the working party dissented from this view given the purported centrality of the eye movements to EMDR as reflected in its title.

Both committees, the working party and multidisciplinary panel, were chaired by Professor Beverley Raphael. As Chair, Professor Raphael oversaw the work done by the two committees and ensured that the diversity of views of the overall Guideline Development Group was considered in formulation of the final research questions and recommendations.

Assessing the Body of Evidence and Generating Recommendations

Once each included study was assessed according to the three dimensions of evidence, an evidence statement matrix was developed for each group of studies focusing on a particular topic (see the full systematic literature review). That matrix rated each body of evidence on five components: evidence base, consistency, clinical impact, venerability, and applicability. Each of those components was given a rating from A to E (or 'not applicable'), with a brief description explaining how that rating was derived. From those evidence statement matrices, a grade for the whole body of evidence supporting each recommendation can be determined (see Appendix B of the full systematic literature review). As described above, the working party then reviewed the strength of the evidence in each area and generated recommendations accordingly. In addition to the

recommendations, the working party was required to provide a grade to indicate the strength of the recommendation. This grade is based on, but not necessarily a direct translation of, the strength of evidence.

NHMRC grades of recommendation are provided to assist users of the clinical practice guidelines in making clinical judgements and to indicate the strength of the recommendation. Grade A and B recommendations are generally based on a body of evidence which can be trusted to guide clinical practice, whereas Grade C and D recommendations must be applied carefully to individual clinical and organisational circumstances, and should be followed with care (see the "Rating Scheme for the Strength of the Recommendations" field).

Further details of the process of Guideline development are available in the National Health and medical Research Council (NHMRC) administrative report. A copy of this report is available upon request to acpmh-info@unimelb.edu.

Rating Scheme for the Strength of the Recommendations

Grades of Recommendation

A: Body of evidence can be trusted to guide practice

B: Body of evidence can be trusted to guide practice in most situations

C: Body of evidence provides some support for recommendation(s) but care should be taken in its application

D: Body of evidence is weak and recommendation(s) must be applied with caution

There are many areas of clinical practice for which there is simply no research evidence available. Rather than provide no guidance in these areas, the working party generated Consensus Points (CP – used when a research question was asked of the data, but no evidence was forthcoming) and Good Practice Points (GPP – used when the research question was not asked; this was often because the working party was confident that no evidence existed). Areas identified as in need of further research are noted as Research Recommendations (RR).

Cost Analysis

Chapter 6 in the original guideline document provides a broad overview of the economic considerations presented by the diagnosis and treatment of posttraumatic stress disorder (PTSD) and acute stress disorder (ASD), with particular reference to the Australian community.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

The Draft Guidelines for the Treatment of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD) were made available for public consultation between 30 November 2012 and 11 January 2013. Four submissions were received and a small number of amendments were made to the Guidelines as a result. Please see Appendix 4 of the original guideline document for details of the public consultation process (see the "Availability of Companion Documents" field), submissions received, and amendments made to the Guidelines.

These guidelines were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 4 July 2013, under Section 14A of the National Health and Medical Research Council Act 1992. In approving these guidelines the NHMRC considers that they meet the NHMRC standard for clinical practice guidelines. This approval is valid for a period of 5 years.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

The research evidence and/or expert opinion underpinning each recommendation is presented in the full text of the original guideline document.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Increased recognition of acute stress disorder (ASD) and posttraumatic stress disorder (PTSD), increased uptake of evidence-based care, and ultimately, better outcomes for people affected by trauma

Potential Harms

- False-positive and false-negative results of screening
- Adults exposed to trauma who wish to discuss the experience, and demonstrate a capacity to tolerate associated distress, should be supported in doing so. In doing this the practitioner should keep in mind the potential adverse effects of excessive ventilation in those who are very distressed.
- Although some authors advise caution in using exposure therapy with older patients who have cardiovascular disease (due to the potential danger posed by high physiological arousal), others suggest that when graded appropriately and done at the client's own pace, exposure can be highly beneficial (and safe) even for patients with significant cardiovascular illness.
- Posttraumatic stress disorder (PTSD) and comorbid substance use may also be treated concurrently with pharmacotherapy, keeping in mind the potential for drug interactions. For example, in the case of comorbid opioid dependence, some selective serotonin reuptake inhibitors (SSRIs) may inhibit methadone metabolism, increasing the risk of toxicity. Note also that antidepressants may not be appropriate for patients actively abusing alcohol or other central nervous system (CNS) depressants.
- All agents have the potential for negative effects. This is true also, of course, for psychological therapies – it is not unusual for symptoms to increase in the short term before they improve – although there is greater awareness of potential side effects from medications. As a result, adults with PTSD may be reluctant to accept pharmacological treatment or, alternatively, side effects may lead to discontinuation. Side effects associated with the SSRIs, for example, include headaches, nausea, loss of libido and agitation. The novel antipsychotics, particularly olanzapine, are associated with substantial weight gain and a risk of type 2 diabetes. The potential for adverse side effects, combined with the questionable benefits, should raise caution in the widespread use of pharmacotherapy in PTSD.
- All practitioners in the field of posttraumatic mental health need to be aware of the potential adverse impacts of the work on themselves. Repeated exposure to the traumatic experiences of others, combined with the high levels of distress often seen when people recount their experiences, can take a toll on the practitioner. Often referred to as 'compassion fatigue', health professionals can be at risk of general stress or adverse psychological reactions such as depression, substance abuse and professional burnout. This compassion fatigue can negatively impact upon the practitioner's clinical skills and consequently on patient care. These adverse impacts may be particularly apparent if the practitioner does not place appropriate limits on the nature and size of their caseload, and if he or she does not receive sufficient training and support. Responsibility for self-care should be shared between the individual practitioner and, where appropriate, their employer organisation and professional body. With evidence that isolation is a risk factor for developing stress-related problems, the needs of practitioners working in isolated rural and remote communities warrant special consideration. For these practitioners, routine training and support may need to be addressed remotely (for example, via the internet and teleconferencing). For general practitioners who are geographically isolated, Balint groups offering peer support operate in some areas of Australia.

Contraindications

Contraindications

The risk of tolerance and dependence are relative contraindications to the use of hypnotics for more than one month except if their use is intermittent.

Qualifying Statements

Qualifying Statements

- These Guidelines should not be regarded as an inflexible prescription for the content or delivery of treatment. They are guidelines, to be interpreted and implemented in the context of good clinical judgement, not rigid rules. They should not limit treatment innovation and development that is based upon scientific evidence, expert consensus, practitioner judgment of the needs of the person, and the person's preferences. Equally, these Guidelines should be used to drive the delivery of first and second line evidence-based treatment approaches unless there is a strong justification for not doing so in a particular case.
- The Guideline developers recognise that there are a number of interventions that are widely used in clinical practice that have not been adequately tested, and it is important to acknowledge that the absence of evidence does not necessarily mean that these interventions are ineffective. The gap between evidence-based interventions and clinical practice should help define the research agenda into the future. Equally, evidence-based interventions should be used in preference to non-evidence-based interventions, unless there is a strong reason not to do so.
- The Guidelines have been formulated with the assumption that treatment will be provided by qualified professionals who are skilled in the relevant psychosocial and medical interventions, as assessed against the prevailing professional standards. The Guidelines do not substitute for the knowledge and skill of competent individual practitioners. The recommendations are not intended to be used prescriptively, but as a guide to appropriate interventions in the context of each person's unique circumstances and their overall mental healthcare needs. Practitioners should use their experience and expertise in applying these Guidelines in routine clinical practice and all clinical interventions should be provided with compassion and sensitivity. In the application of these Guidelines to the Australian healthcare setting, consideration needs to be given to the availability and accessibility of appropriate and relevant services – especially in rural and remote settings – and of appropriate education and training to support practitioners in the delivery of the recommended evidence-based interventions.
- The recommendations in this document are based on the best evidence available at the time of compilation (November 2011). These Guidelines must be used in conjunction with clinical judgement and patient preference. The attending clinician has ultimate responsibility for the appropriate choice of therapy.
- This publication reflects the views of the authors and not necessarily the views of the Australian Government.
- See the "Additional notes," "Limitations of the guideline,' and 'Limitations of the review' sections in the original guideline document for more information.

Implementation of the Guideline

Description of Implementation Strategy

Implementation of the Guidelines

The overarching objective of these Guidelines is to improve outcomes for people affected by trauma. For this to be achieved, the key Guideline recommendations need to be effectively disseminated to health practitioners, service planners and purchasers and people directly affected by trauma. The communication objectives of the dissemination strategy include, to:

- Generate awareness of the Guidelines and recommended interventions amongst health practitioners
- Generate awareness of the Guidelines amongst education and child mental health professionals
- Engage professional bodies and peak organisations in the dissemination process
- Engage organisations that promote best practice in the dissemination process
- Ensure mental health consumers have access to the Guidelines' key recommendations through the support of organisations such as the Mental Health Council of Australia
- Demonstrate practical policy implications of the Guidelines to decision makers in key government departments and industry organisations

These objectives will be met through a range of activities including the development of accessible Guideline companion documents for practitioners and community members, peer reviewed publications, media releases (including the use of social media), targeted consultation with key stakeholders and decision makers in government and mental health services and the integration of recommendations into relevant policy and training initiatives.

In regard to the implementation in Australia of pharmacological recommendations outlined in these Guidelines, doctors should be mindful of

regulations that may apply where the cost of the medicine is subsidized by the Government (Pharmaceutical Benefits Schedule) or another third party.

Implementation Tools

Chart Documentation/Checklists/Forms

Mobile Device Resources

Patient Resources

Quick Reference Guides/Physician Guides

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder. Melbourne (Australia): Australian Centre for Posttraumatic Mental Health; 2013. 177 p. [697 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2007 Feb (revised 2013)

Guideline Developer(s)

Phoenix Australia - Centre for Posttraumatic Mental Health - Nonprofit Organization

Source(s) of Funding

The guideline developers gratefully acknowledge the financial contribution of the Department of Veterans' Affairs, the Department of Defence and beyondblue in the development of these Guidelines.

Guideline Committee

Guidelines Development Group

Composition of Group That Authored the Guideline

Steering Group: Professor Beverley Raphael, Psychiatrist, Population Mental Health and Disasters, Disaster Response and Resilience Research Group, University of Western Sydney; Professor David Forbes, Clinical Psychologist, Director, Australian Centre for Posttraumatic Mental Health, University of Melbourne

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Refer to the original guideline document for members of the multidisciplinary panel, special population and trauma types area experts, Australian Centre for Posttraumatic Mental Health (ACPMH) project team, methodologist, and systematic review team.

Financial Disclosures/Conflicts of Interest

Each individual involved in the development of the Guidelines is required to declare all known or perceived conflicts of interest (COI). It is acknowledged that COI will arise from time to time; however, the process outlined within these Terms of Reference will ensure that all conflicts are identified, disclosed, and managed in a rigorous and transparent way that promotes confidence in the legitimacy, impartialness, integrity, and fairness of the outcomes of these Guidelines.

Process for Managing Conflict(s) of Interest

The process for managing COI is presented in Figure 2 in the appendices of the original guideline document (see the "Availability of Companion Documents" field). Each individual involved in the development of the Guidelines (including all members of the working party and multidisciplinary panel) will be required to complete a COI declaration prior to each activity or meeting. For example, working party members will be required to complete a COI prior to each working party meeting (approximately once per quarter). Declarations will then be collated by the Australian Centre for Posttraumatic Mental Health (ACPMH) project manager and sent to the Steering Committee for review.

The Steering Committee is responsible for reviewing all declarations and determining if a conflict is present and relevant. If a conflict is identified and it is determined that the conflict would result in undue influence to the process of developing the Guidelines then the Steering Committee must complete the Conflict of Interest Action Taken document. This document identifies what action needs to be taken to mitigate the conflict (for example, remove that individual from a specific part of the decision making process).

Declarations of COI from Working Party members (including the ACPMH development team) will be discussed at the beginning of all Working Party meetings. Declarations from the Multidisciplinary Panel (MDP) will be shared with the Chair of the MDP before each activity involving the MDP. All declarations and any action taken from those declarations will be recorded in the final Guidelines document as an appendix.

Guideline Endorser(s)

Australian Psychological Society - Medical Specialty Society

Royal Australian and New Zealand College of Psychiatrists - Professional Association

Royal Australian College of General Practitioners - Professional Association

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: This guideline updates a previous version: Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder. Melbourne (Australia): Australian Centre for Posttraumatic Mental Health; 2007 Feb.

In recognition of the pace of advances in the field, it is recommended that the guidelines be reviewed and updated in five years' time.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.

Manager, Phoenix Australia, Level 3, 161 Barry Street, Carlton Victoria 3053 Australia; Fax: +61 3 9035 5455; Email: phoenix-finance@unimelb.edu.au

Availability of Companion Documents

The following are available:

- Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder. Appendices. Melbourne (Australia): Phoenix Australia - Centre for Posttraumatic Mental Health; 2013. 596 p. Available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.
- Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder. Guidelines summary. Melbourne (Australia): Phoenix Australia - Centre for Posttraumatic Mental Health; 2013. 56 p. Available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.
- Australian guidelines for the treatment of acute stress disorder & posttraumatic stress disorder. A practitioner guide to treatment. Melbourne (Australia): Phoenix Australia - Centre for Posttraumatic Mental Health; 2013. 10 p. Available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.

Additional resources, including vodcasts and practitioner resource packs, are available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.

Patient Resources

The following are available:

- A number of fact sheets and booklets for people affected by trauma, their families and friends are available from the Phoenix Australia - Centre for Posttraumatic Mental Health Web site.
- Phoenix has developed a smartphone app for sufferers of posttraumatic stress disorder (PTSD), on behalf of the Department of Veterans' Affairs (DVA) and the Australian Defence Force (ADF). PTSD Coach Australia is an adaptation of the US Department of Veterans Affairs' PTSD Coach app, and has been designed specifically for the Australian setting. While the app was developed to help current and former serving members of the Australian Defence Force, it will also be beneficial to other people suffering from PTSD. For more information, including a Clinician Guide, visit the At Ease Web site.

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on November 12, 2010. The information was verified by the guideline developer on December 22, 2010. This summary was updated by ECRI Institute on September 16, 2015. The updated information was not verified by the guideline developer. This summary was updated by ECRI Institute on May 24, 2016 following the U.S. Food and Drug Administration advisory on Olanzapine.

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